III.C.2 H/U Versus U g/l Relationships

The following relationships were used to determine solution composition.

For uranium nitrate solutions the relationship between H/U and the uranium concentration was derived from the equation:

$$\rho_{sol} = 1.0012 + 0.3177\ M_u + 0.03096\ M_{HNO_3}$$

For uranium-water solutions the relationship was:

$$H/U = \frac{25860}{(.9790 + .02101f_{233})\ U\ g/l} - \frac{1.368}{(.9790 + .02101f_{233})}$$

where f_{233} is the weight fraction of ^{233}U in uranium.